Space archive to be established at UH-Clear Lake

The University of Houston-Clear Lake will receive and maintain Johnson Space Center's historical records under a memorandum of understanding signed during a recent ceremony at UHCL.

The agreement is part of the continuing effort by NASA and JSC to share historic information with the public.

The ceremony formalizing the agreement, between JSC, UHCL and the National Archives and Records Administration, was held in the Alfred R. Neumann Library at UHCL. JSC officials and UHCL President Dr. William Staples joined in the signing of the agreement, which has been approved and signed by the Archivist of the United States.

The center's history collection includes copies of correspondence, memos, reports, interviews and other materials documenting the history and role played by the center in NASA's human space flight program.

The first series of documents to be moved are records of the Apollo Program, which had once been kept at the Woodson Research Center at Rice University's Fondren Library. More than 1,000 oral history interview tapes, transcripts and videos documenting the men and women that worked on the Mercury, Gemini and Apollo programs will be included in the initial move.

Records scheduled for later transfer include material on the space shuttle, space station and the general history of JSC.

Archives to house the records are under construction in the library, and should be completed later this year. The archives will be open to students, researchers and the public.

"Transfer of the center's history collection to UHCL will allow easier access to this material by scholars and the general public," says JSC Historian Glen Swanson.

A great deal of unprocessed material in the center's history collection needs attention, Swanson said. Those records transferred to UHCL will free up additional on-site space for processing this backlog of material, which can then be cataloged and indexed before joining the rest of the collection at the university.

The expanded UHCL archives will be staffed by a full-time archivist and other trained support personnel who will be able to assist researchers in using the collection. The UHCL archives will be a secure, environmentally controlled facility that meets National Archives and Records Administration standards.

Researchers will have access to an electronic index for the entire collection. Efforts are under way to digitize the collection, so the database can be linked to the documents, enabling researchers to electronically search the collection and retrieve digital scans of the documents through the Internet. Plans call for this database to be moved to a public Web site, providing users with remote access.

Under the agreement, the transfer will be for an initial 10-year loan period, with options for possible extension. ■

NASA JSC 2001e039002 Photo by Bill Stafford

Dr. William Staples, president, University of Houston-Clear Lake, and Vicki Pendergrass, director, NASA/Johnson Space Center Information Systems Directorate, sign a memorandum of understanding allowing UHCL to receive and maintain JSC history archives. Also attending the signing ceremony, from left, are Dr. Joseph McCord, director, Alfred Neumann Library, UHCL; Glen Swanson, JSC historian; Patti Stockman, JSC records manager; and Larry Sweet, chief, Information and Imaging Sciences Division, JSC.

Space research institute increases scope

The National Space Biomedical Research Institute (NSBRI) is increasing its scope by funding 86 research projects in 19 states and adding four new research areas.

"With these projects, the Institute can better explore the health-related problems associated with long-duration human space flight," said Dr. Bobby R. Alford, NSBRI chairman of the board and CEO. "There are many physical and psychological challenges that must be addressed before women and men can explore our solar system."

The NSBRI was established in 1997 through a NASA competition to create a consortium of leading research institutions working toward the goal of reducing health concerns related to exploration missions. Twelve institutions comprise the NSBRI consortium and are responsible for its program development.

The 86 projects, funded for one- to three-year periods, will be carried out at 67 institutions involving 250 researchers in 19 states. Selected from a group of 281 research proposals, each project underwent rigorous independent peer review by a panel of scientists not affiliated with the Institute.

These new projects mark the first time the NSBRI has selected its projects through an open, competitive solicitation process. Approximately one-half of the projects are slated for universities and laboratories outside the consortium.

All projects address key issues related to human health in space and are carried out by integrated theme-based teams of scientists. Many of the health issues will be faced by International Space Station crews and will pose an even greater threat to crews exploring other planets.

By adding four new teams, the NSBRI now focuses on 12 research areas.

The new areas–nutrition, physical fitness and rehabilitation; neurobehavioral and psychosocial factors; integrated human function; and smart medical systems–will allow more complete coverage of health issues related to two-to-three year exploration missions. Research issues for the new teams include:

- How much and what type of food is needed to maintain proper nutrition?
- What type of exercise and rehabilitation is needed before, during and after the flight?
- How can astronauts best cope with separation from family and Earth?
- What type of leadership style and crew composition is most suitable?
- How can medical diagnoses be made and treatments delivered in deep space?
- How do the solutions or activities implemented to maintain the integrity of specific parts of the body– bone, heart and muscles–affect the total body?

"Like the original eight research areas, these new teams hold potential for advancing prevention and treatment issues on Earth," Alford said.

NSBRI's other teams address bone loss, muscle weakening, cardiovascular changes, sleep disruption and vigilance, immunology and infection, balance and orientation, radiation exposure and medical research technology needs.

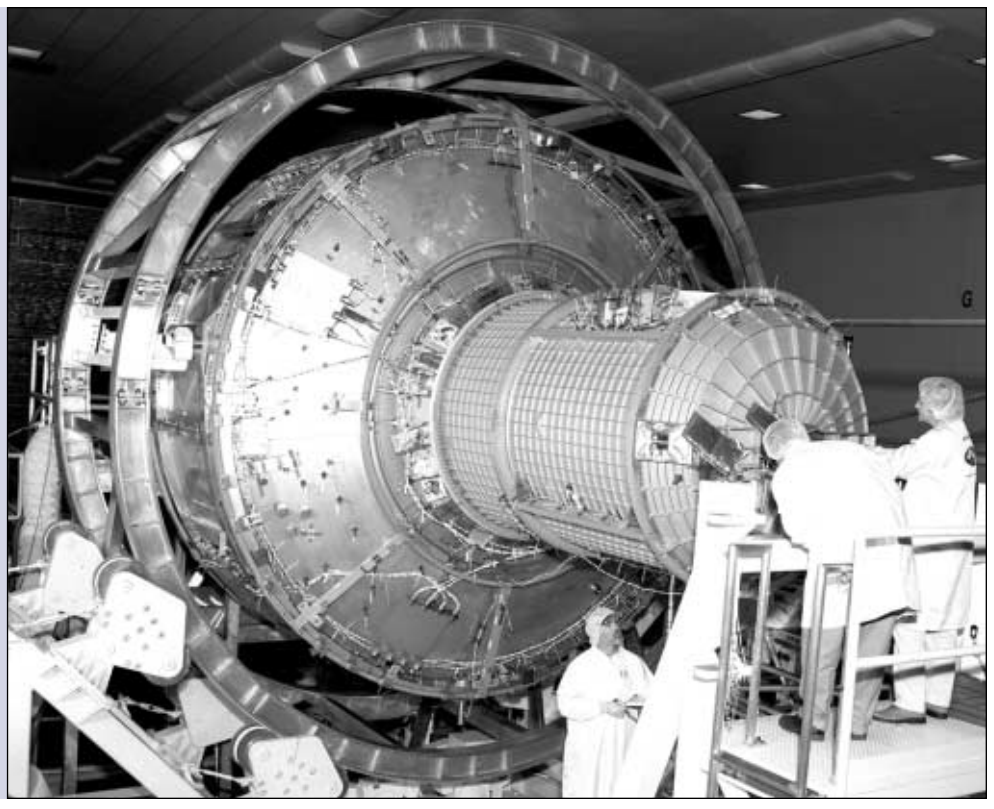
The NSBRI consortium includes Baylor College of Medicine, Brookhaven National Laboratory, Harvard Medical School, The Johns Hopkins University, Massachusetts Institute of Technology, Morehouse School of Medicine, Mount Sinai School of Medicine, Rice University, Texas A&M University, University of Arkansas for Medical Sciences, University of Pennsylvania Health System and University of Washington. ■

Fifth space station element delivered to NASA

The Joint Airlock was officially handed over to NASA recently by members of Boeing's Airlock Program teams from Houston, Kennedy Space Center, Canoga Park and Huntsville. This official sign-off marks the completion of the Phase II Space Station Program and paves the way for the launch of the Joint Airlock scheduled for June 8 on STS-104.

The 6.5-ton, 20-foot-long Airlock will be connected to the right side of the Unity module. It has two components–a crew lock from which astronauts and cosmonauts exit the International Space Station and step into space, and an equipment lock used for storing gear.

The handover of the Joint Airlock marks the fifth in a series of major elements turned over to NASA–the Unity node was handed over in 1997 and the integrated truss structures Z1 and P6 and the Destiny Laboratory were handed over last year. ■



In its final days at NASA's Marshall Space Flight Center facilities in Huntsville, Ala., the International Space Station's Joint Airlock Module undergoes exhaustive structural and systems testing, prior to being wrapped and lifted into a protective container for its flight to Kennedy Space Center, Fla.